

## **REMARKS**

Claims 1-16 and 26-28 are now pending in the application. Claims 29-33 were cancelled without prejudice. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **CLAIM OBJECTIONS**

Claim 5 is objected to because of certain informalities, specifically a typographical error. Applicant has amended claim 5 according to the Examiner's suggestion to read "two side holes" instead of "two sides holes". Therefore, reconsideration and withdrawal of this objection is respectfully requested.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1, 2, and 26-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable by Bastian et al (U.S. Pat. No. 5,769,854) in view of Barnes (U.S. Pat. No. 5,496,324). This rejection is respectfully traversed.

Claims 29-31 were cancelled without prejudice and will not be discussed further.

Bastian et al discloses a cutting punch 60 having a cutting edge 70. See FIGS. 3 and 5. The cutting punch 60 is not pivotable at all relative to the guide 32. The punch is "inserted into the first channel 80, with the splines 88 engaging complementary grooves 86" as shown in Figs. 2 and 3, and then retracted and removed from the first channel 80. See line 66, column 3, to line 25, column 4. The process is then repeated with a second channel 100. See Figures 5 and 7, column 4, lines 35-60. The splines 88 are

inserted in the grooves 104, constraining the punch 60 from pivoting. Grooves 104 communicate with grooves 110 allowing the punch to be removed downwardly, as shown in FIG. 7. The cutting punch 60 is not a mill and is not pivoted about a lateral axis of the opening of the guide 32 or any other axis whatsoever. On the contrary, the cutting punch 60 is constrained in the lateral direction of the channel 80 or 100 between pairs of grooves 86, 104, 110 defined on the sides of the respective channels to provide only a constrained linear movement that cannot pivot at all. Further, the cutting punch 60 is received in either a first channel 80 or a second channel 100 and is constrained from movement in the lateral direction relative to the respective channels by a spline-and-groove engagement (grooves 86, 104 or 110). Accordingly, the cutting punch 60 can only be advanced in a linear slidable direction along pairs of opposing grooves on the sides of each channel, while constrained between the opposing grooves and cannot be shifted or adjusted along a lateral axis of the opening.

Barnes discloses a milling apparatus that includes a cutter 20 that can rotate about its longitudinal axis. The cutter can be "shifted radially" about an axis through pins 28 which are perpendicular to the longitudinal axis of the cutter. See FIG. 2, and column 3, lines 30-33. This motion is a *pivoting* motion about the axis defined by the pins 28. During this pivoting motion, the opposite end of the cutter, including the head 22 and drive shaft 24, moves back and forth along a race track 27 and corresponding slot 18. This is the motion that is characterized as "slidable along an opening (18)" in the Office Action. The cutter 20 does not and cannot slide along the opening 18 because it pivots, i.e., rotates about the pin 28. The cutter 20 moves along a circular arc and the top portion of the cutter 20 is constrained by the slot 18, although the top

portion still follows an arcuate path. See FIGS. 1, 2 and 7. Accordingly, the cutter 20 of Barnes is rotatable about its longitudinal axis, pivotable about an axis (pin) 28 perpendicular to the longitudinal axis, but not slidably adjustable or shiftable along the axis 28.

As should be obvious from the above description to a person of ordinary skill in the art, an attempt to combine the cutting punch of Bastian with the rotatable pivoting mill of Barnes not only will not provide a better mill, it will not even provide a working instrument. Further, the cutting punch has nothing to gain from a rotatable mill, and the other way around. Inherently, a cutting punch and a rotatable mill function differently and their functions teach away from each other.

Even assuming that Bastian et al and Barnes are combinable, not even the benefit of hindsight can produce the instrument of the claims 1 and 26 from the disclosures of Bastian et al and Barnes. The combination of Bastian et al with Barnes still fails to disclose all the elements of independent claims 1 and 26. Specifically, and regarding claim 1, the combination fails to disclose, *inter alia*, that the rotatable mill is pivotable about the lateral axis *and* slidably adjustable along the lateral axis. Regarding independent claim 26, the combination fails to disclose that the rotatable mill is pivotable about the lateral axis *and* the mill can be shifted relatively to the opening along the lateral axis. Therefore, independent claims 1 and 26 are patentable over Bastian et al in view of Barnes.

Claim 2 depends from claim 1 and is, at least for this reason, also patentable over Bastian et al in view of Barnes, as well as independently patentable. Claims 27

and 28 depend from claim 26 and are, at least for this reason, also patentable over Bastian et al in view of Barnes, as well as independently patentable.

Accordingly, claims 1, 2 and 26-28 are patentable over Bastian et al in view of Barnes.

Claims 3, 4, and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bastian et al in view of Barnes and further in view of Coleman (U.S. Pat. No. 5,591,207). This rejection is respectfully traversed.

The combination of Bastian et al with Barnes was already discussed above. Coleman is cited in the Office Action for its disclosure of a rod with grooves. Coleman is directed to a drilling system for inserting threaded anchors. Coleman discloses a driver shaft 200 for inserting an anchor 108 into a bone 142. The shaft includes detent grooves 202 that receive a snap collet 204 or snap ring 206 for discrete depth penetration adjustments. The grooves 202 are not truncated. When the snap collet or ring engages the grooves, the penetration depth of the anchor is stopped and the shaft does not move any further along its longitudinal axis. The grooves 202 and the snap collet /ring provide discrete *penetration depth adjustments of the shaft 200*. See column 6, line 64 to column 7, line 9. Neither Bastian et al nor Barnes would benefit from such depth penetration mechanism that includes grooves engaging a snap collet or ring. Without impermissible hindsight provided by Applicants' teachings, Bastian et al, Barnes and Coleman cannot be dismantled and reduced to their individual elements, some elements discarded, and other elements stripped of their context, modified and rearranged to provide the device recited in claims 3, 4 and 10.

Even assuming, without admitting, that Bastian et al, Barnes and Coleman are combinable, the combination still fails to provide all the elements of claims 3, 4 and 10.

Each of claims 3 and 4, in view of their dependence from claim 1, and independent claim 10 require the rotatable mill is pivotable about a lateral axis *and* slidably adjustable along the lateral axis. These limitations are not disclosed by Bastian et al, Barnes or Coleman, either separately or in combination. As discussed above, Coleman does not disclose a shaft slidably about a lateral axis. Further, claim 10 recites that the mill is slidably adjustable along the lateral axis in a first position, which is parallel to the base, and constrained in the other positions that are at an angle relative to the base by a pin selectively engaging one of the *truncated* grooves. If the grooves are not truncated, engagement of the pin with the grooves and lateral constraint *only in the first position and not in the other positions* is not possible. Coleman discloses grooves 202 that are not truncated, and there is no reason for Coleman's grooves to be truncated. Further, Coleman (or Bastian et al or Barnes) fails to disclose a pin selectively engaging one of the truncated grooves, the pin being perpendicular to the base of the guide.

Accordingly, claims 3, 4 and 10 are patentable over Bastian et al in view of Barnes and further in view of Coleman.

Claims 32 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bastian et al in view of Barnes and further in view of Dietz et al (U.S. Pat. No. 5,653,714).

Claims 32 and 33 are canceled without prejudice, and therefore this rejection is now moot.

Reconsideration and withdrawal of these rejections is respectfully requested.

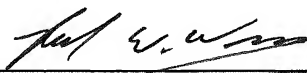
**CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: August 1, 2007

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